

**To the Mayor and Members of the City Council****March 27, 2020**

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SUBJECT: MAINTENANCE OF STREET LIGHTS

The purpose of this informal report is to provide a status update on the maintenance of street lights in the City of Fort Worth.

The Transportation and Public Works Department, Transportation Management Division is responsible for maintaining 69,000 street lights citywide. This includes lights owned by the City of Fort Worth and the Texas Department of Transportation (TxDOT). Approximately 47,000 of the 69,000 street lights have not been converted to LED and require more frequent maintenance than LED lights. The Transportation Management Division uses City forces to maintain approximately 17,200 street lights annually which includes addressing maintenance requests and converting approximately 4,000 lights per year to LED. Maintenance includes replacing damaged wiring, replacing globes or fixtures, replacing poles, and repairing electrical services.

In July 2016, consultant DTS collected data to identify and mark the location of existing street lights. The assessments were integrated into the City's VueWorks asset management system in August 2018. The asset management system has provided the Transportation Management Division with a strategy to address street light maintenance both proactively and reactively. Proactive maintenance is based on field observations. Reactive maintenance for new and existing lights is managed through the City's customer service call center, and requests are evaluated on a case-by-case basis and planned based on annual PayGo budgets. The City has averaged 1,010 maintenance requests per month for street lights and since October 1, 2019 has issued 3,498 work orders.

The annual Pay As You Go (PAYGo) street light maintenance budget in Fiscal Year 2020 is \$1.8 million. This funding is from the department's PAYGo base allocation and the new \$500,000 increased allocation provided by City Council. The total PAYGo maintenance budget allocated for lights on City streets is \$1.3 million, and the remaining maintenance budget for TxDOT freeway lights is \$500,000 for FY2020. The increased funding provided in FY2020 has been allocated to address the backlog of knockdown repairs and to increase lighting along arterials and neighborhoods which will enhance pedestrian safety, specifically focusing in the Majority Minority Areas (MMAs). The additional funding is being used to convert and repair 275 street lights in MMAs. Additionally, funding from the 2018 Bond is planned to replace 2,235 street lights in Super MMA areas starting in summer 2020 via the LED Conversion Project.

Street lights along East Loop 820 between Brentwood Stair Road and Craig Street have experienced intermittent operation due to ongoing wire theft. The street light operational capacity, often referred to as burn rate, for this section of freeway is 30%. The street light burn rate is the ratio of lights that work to the total number of lights. The City's burn rate goal for arterials as reported in the TPW Business Plan is 85%. Between 2017 and 2019, this stretch of East Loop 820 has been repaired several times at a cost of \$585,139. New copper wire was stolen in 2017 and was reported to City Police. In an attempt to address ongoing issues with theft in 2018 the City took the advice of TxDOT and replaced copper wiring with aluminum wire along with "aluminum wire" signage on light poles. At the time, the aluminum wire was the industry standard to deter theft because it has a lower scrap value than copper wire. Although this measure was taken, vandalism continued to occur in the corridor resulting in inoperable lights along East Loop 820.

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The City of Fort Worth and the Texas Department of Transportation (TxDOT) staff recently met to discuss maintenance concerns in the East Loop 820 and IH-30 corridor and to come up with a strategy to address the ongoing lighting outages and the continued issues with theft. Although the existing Municipal Maintenance Agreements between the City and TxDOT indicate that the State will construct and the City will maintain, TxDOT has agreed to utilize Category 1 – Preventative Maintenance and Rehabilitation funding to assist with repairs in both corridors, given the City's maintenance expenditures and issues with theft to date. The City is responsible for providing design plans, which should be complete in the next three months for TxDOT to program and implement. Implementation includes TxDOT replacing wire and installing anti-theft measures utilized with some success in other parts of the state where similar thefts were repeated problems.

If you have any questions, please contact Tanya Brooks, Transportation and Public Works Assistant Director, at 817-392-7861.

David Cooke
City Manager

Attachment



TxDOT Freeway Agreements

No.	Street	From	To	Agreement Date
1	East Rosedale	Main	Rosedale	6/6/2008
2	Hemphill	Felix	Peter Smith	2/24/1975
3	HWY 121	Sylvania	Haltom Road	11/13/1987
4	HWY 820	SHWY 287	IH 20 Interchange	7/25/1990
5	HWY 820	SHWY 287	North City Limits	5/22/1991
7	IH 20	SHWY 183	Hemphill	11/22/1987
8	IH 20	West City Limit	SHWY 183 to Westridge	3/13/1967
9	IH 20	IH 35	Wichita	7/25/1990
10	IH 30	IH 35	Oakland	3/31/1978
11	IH 30	University	IH 35 Interchange	12/3/1992
12	IH 30	Westridge	Pentacost	3/4/1986
13	IH 30	Camp Bowie	Summit	3/18/1953
14	IH 30	Pentacost	University	5/22/1987
15	IH 30	Las Vegas Trail	SHWY 183	3/27/1972
16	IH 35	Felix	Altamesa	2/10/1987
17	IH 35	IH 20	City South Limit	8/18/1975
19	IH 35	Hattie	Felix	9/14/1981
20	IH 35	Morningside	East Rosedale	3/18/1953
21	SHWY 183	Commerce	Nichols	7/3/2012
22	SHWY 183	Bryant Irvin	IH 20 Interchange	1/29/2010
23	SHWY 287	IH 35	Mitchell	10/22/1962
24	Spur 280	Grove	IH 35 Interchange	2/24/1964
25	Spur 347	EB Weatherford	UP	7/3/2012



CITY OF FORT WORTH TxDOT FREEWAY AGREEMENTS

TxDOT Freeway Limits

City Streets

City Limit

0 1 2 4 6 Miles

